ABSTRACT OF THE DISCLOSURE

A direct oxidation fuel cell which rapidly increases output power in response to demand. A conduit and valve arrangement allows neat or concentrated fuel to be introduced directly into anode flow field plate effectively bypassing the normal, time-consuming fuel flow path and eliminating the accompanying delay. A controller senses the demand for power and opens or closes the valves as appropriate. In alternative embodiments, neat or concentrated fuel is supplied directly to the anode diffusion layer or a protonically conductive membrane.